



**BUILDING ADVISORY BOARD OF APPEALS  
7447 E. INDIAN SCHOOL RD.  
PLANNING CONFERENCE ROOM  
FIRST FLOOR  
JANUARY 15, 2004**

**MINUTES**

**PRESENT:** Anthony Palmiotto  
Bucky Haver  
Joseph Campodall-Orto  
Joel Rencsok  
Wendy Shi  
Laurence Hampton

**ABSENT:** Kenneth Alexander, Chairman  
Christopher Valocchi  
Sandra Herd

**STAFF:** David Potter, Building Official  
Anthony Floyd, Green Building Program  
Ed Peaser, Building Inspections Manager

**OTHERS PRESENT FOR ALL OR PORTIONS OF THE MEETING:**

Joseph Mistovich

**CALL TO ORDER**

Board member Haver called the regular meeting of the Building Advisory Board of Appeals to order at 5:25 p.m.

**ROLL CALL**

A formal roll call confirmed members present as stated above.

## **MISCELLANEOUS**

### **Board & Commissions Orientation Meetings**

Mr. Potter encouraged the Board members' to attend a Board & Commission orientation meeting noting they were worthwhile if they could spare the time.

### **Electrical non-linear loads discussion**

Mr. Potter reported that Mr. Mistovich brought the issue of electrical non-linear loads to his attention and to the City Manager. He further reported that he invited Mr. Mistovich to the Board meeting to allow them to have an open, public discussion regarding his concerns.

Mr. Mistovich reported that he has been in the electrical business for a long time but has only been in Arizona for 10 years noting he is from the East Coast.

Mr. Mistovich reported that he has been an activist for children's rights for over 60 years. He further reported that when he started working for one of the largest school architect firm in the country they brought him on board to teach their registered profession electrical engineers about power quality and high voltage distribution. He stated that in his opinion there is a clear and indisputable life safety danger at all Scottsdale Schools due to electrical code violations with addition of computers and solid state electronic lighting fixtures.

Mr. Mistovich stated he has spoken with many City staff members over the last nine months and given them documentation on what creates the problem and what they are missing which is harmonics. He further stated that Arizona does not have the type of equipment that major cities have for subways and plants. He remarked what creates the problem in Scottsdale is that there are 17,000 computers and over 22,000 solid state electronic light fixtures in the schools and these are nonlinear loads. He provided information regarding the wiring of solid state equipment. He also provided information on potential health risks to students.

Mr. Mistovich stated that he was told that the City of Scottsdale does not have electrical inspectors. He further stated that other cities do have electrical inspectors. He reported on the advantage of having somebody trained in electrical. He further reported that the inspectors must enforce the codes. He stated that in his opinion 100 percent of the schools are not grounded properly.

Board member Rencsok stated he would say that in his opinion 50 percent of the schools are not grounded properly. He further stated schools are exempt from permits and the maintenance people do the electrical work so they often don't comply with the code because they are not trained in codes and are not qualified electricians. He noted he would agree that there are problems.

Board member Rencsok inquired what Mr. Mistovich was requesting from the Board. Mr. Mistovich stated that he brought this issue up to Mr. Potter and he invited him to attend the meeting. Mr. Potter stated the purpose is to have a discussion and look for ideas they could do for new installations.

Board member Haver inquired if Mr. Mistovich was aware of another community where this has been addressed and standards have been created. Mr. Mistovich reported this is being cleaned up all over the country.

Mr. Mistovich commented that the explosion that happen at City Hall was caused because the circuits were overloaded. He further commented his main concern is for the children in the schools.

Board member Haver inquired if Mr. Mistovich has contacted the School Board about these issues. Mr. Mistovich replied the Schools have been made aware of these problems, and they say their hands are tied as City of Scottsdale Code Inspectors have approved their installation so they cannot get the State School Facility Board to fund necessary remedies. He noted that in his opinion the problem is that inspectors are not enforcing the code. He felt the inspectors need to follow the plans. He remarked that part of the problem has to do with the power companies.

Mr. Potter stated that part of the problem with harmonics and solid state equipment is that typically when a building comes in for review they don't know what type or amount of equipment will be used.

Mr. Peaser commented on the lighting changes that have occurred in the past five years. He reported that when schools change out the lighting they do it without permits because they are not required to obtain them because they are a government entity.

Board member Haver inquired if the City of Scottsdale has an electrical inspector. Mr. Peaser stated that four of the five inspectors are electrical certified.

Mr. Mistovich provided additional information regarding his concerns with the utility companies. Board member Haver inquired if Mr. Mistovich has contacted the utility companies. Mr. Mistovich replied that he has brought these issues up to them a number of times. He noted that he has worked with all of the utility companies in the United States and he would rank APS and SRP next to last as far as social conscience, quality of design, distribution, and power quality. Board member Haver commented that this is a irrigation crop Stated that is not even 100 years old and 90 percent of the buildings are less than 25 years old and there is a lot to be learned here. He further commented that he appreciated Mr. Mistovich bringing this issue to the Board and assured him they are not taking it lightly.

Board member Haver inquired if the Mr. Mistovich has found a large commercial project in Arizona that was done right. Mr. Mistovich replied in the affirmative. He provided information on projects that are done correctly.

Mr. Potter stated that our primary concern here should be the issue of harmonics. He further stated it would be more appropriate to discuss issues with the utility companies with the Corporation Commission or whoever controls the utility companies. He remarked that with regard to harmonics, he felt that currently the City of Scottsdale doesn't have a problem with new major projects. Mr. Mistovich inquired about the Galleria. Mr. Potter replied the Galleria was done 12 years ago and is not a computer center.

Mr. Potter commented a problem that exists with office and schools is that they add solid state equipment without having plans or the knowledge of city staff. He further stated that city staff needs to be diligent about calling to the attention of the design engineer whether harmonics have been addressed and make sure the design engineers are making accommodations for potential problems.

Board member Rencsok remarked that there is no way for the Building Safety Department to police the contractor. He further remarked in the Valley 80 percent of the electrical work is going on without permits and until they can get registered contractors to use State licensed electricians things are not going to get better.

Mr. Peaser stated the electrical code is specific. He further stated an inspector would inspect 10 to 15 percent of the job as a representative of an entire job. He remarked that any contractor that wants to hide something could. He further remarked that often things are changed after it is approved.

Board member Rencsok stated another reality is that architects often do not follow all of the electrical engineers suggestions to stay within budget.

Board member Hampton remarked that he thought this Board could not solve the problem, but that the Board realizes there is a problem. He suggested Mr. Mistovich contact the group that governs the professional electrical engineers.

Mr. Mistovich thanked the Commission for their time but noted that he had another appointment so he would have to leave.

Mr. Potter stated as a brief follow up that Mr. Mistovich brought this to his attention last June or July and subsequently he discussed this with a number of electrical engineers. He noted the engineers he has talked to have not voiced a concern. He further stated that he did not think there was a need for concern regarding new buildings because to his knowledge they have made accommodations for harmonics.

Mr. Potter passed out a copy of the study done in Oakridge Tennessee regarding this issue and the copy of the letter from Mr. Mistovich dated 12-22-03.

Board member Rencsok commented that he would agree there is a problem with harmonics in schools. He further commented the problem is that when these schools were built they never envisioned the power they would need. He noted a lot of problems have been caused by all the new technology.

Mr. Peaser provided information on the city's inspectors and their background.

Mr. Potter stated the consensus seems to be that there is no question the problem with harmonics exists. He further stated he felt on large new projects the engineers are handing it okay. He remarked that in the end, it is the engineers' responsibility.

Board member Rencsok stated there are two items harmonics and voltage drop. Mr. Potter noted that the engineers are over designing to ensure there is not a problem.

Board member Hampton stated that he felt there was nothing this Board could do but would like additional time to think about it.

## **NEW BUSINESS**

### **Election of Officers**

Board member Rencsok nominated Kenneth Alexander as Chair of the Building Advisory Board of Adjustment. Second by Board member Hampton and passed unanimously.

Board member Rencsok nominated Bucky Haver as Vice Chair of the Building Advisory Board of Adjustment. Second by Board member Hampton and passed unanimously.

## **OLD BUSINESS**

### **Building Codes Adoption discussion**

Board member Haver inquired if the adoption of the new code is affecting people in the field. Mr. Peaser stated it has been enforced since September 16<sup>th</sup>. He further stated they would be setting up a training meeting. Mr. Potter reported that not much has changed.

Board member Hampton inquired how many cities have adopted this code. Mr. Peaser replied Fountain Hills, Paradise Valley, Glendale, and Chandler. He provided information on other cities that most likely will adopt it.

Board member Haver inquired if the code would be revised in 2006. Mr. Peaser replied in the affirmative.

Mr. Potter commented they would be taking some minor housekeeping issues with the code back to City Council. He further commented that the City Attorney's office inadvertently struck 4 paragraphs and they would be added and sent back with the housekeeping issues.

Board member Haver inquired how the elimination of Rural Metro would affect them. Mr. Potter replied that he did not know what would happen within the fire department organization but he would expect it would not look a lot different in the fire prevention division that they deal with.

Board member Hampton inquired when the next meeting would be scheduled. Mr. Potter replied the Board does not meet regularly only when there is business to conduct. Barring the submittal of an appeal, the board will probably meet in July.

### **APPROVAL OF THE MINUTES**

A Motion was made by Board member Rencsok to approve the minutes of the May 15, 2003 meeting. The Motion was seconded by Board member Palmiotto and passed unanimously.

Meeting adjourned at 7:00 p.m.

Submitted by:

For the Record Court Reporters